

## Claims

1. A method of providing power to an audio signal processor, such method comprising the steps of:

providing a receptacle for a housing of a voltage converting power supply within an enclosure of the audio signal processor; and

removably disposing the voltage converting power supply within the enclosure of the audio signal processor.

2. The method of providing power to an audio signal processor as in claim 1 further comprising disposing a receptacle for a plug of an external power source within the housing of the power supply.

3. The method of providing power to an audio signal processor as in claim 1 further comprising providing a set of external conductors for coupling the power supply to the audio signal processor.

4. The method of providing power to an audio signal processor as in claim 3 further comprising disposing an electrical receptacle in the enclosure of the audio signal processor for coupling power from the power supply to the audio signal processor.

5. The method of providing power to an audio signal processor as in claim 3 further comprising disposing a plug on an end of the external conductors for engaging the electrical receptacle in the enclosure of the audio signal processor.

6. The method of providing power to an audio signal processor as in claim 3 further comprising defining the audio signal processor as being an audio amplifier.

7. The method of providing power to an audio signal processor as in claim 1 further comprising providing a inner set of dimensions of the receptacle that are complementary to an outer set of dimensions of the converting power supply.

8. The method of providing power to an audio signal processor as in claim 7 further comprising tapering the power supply and receptacle to prevent improper insertion.

9. The method of providing power to an audio signal processor as in claim 7 further comprising preferentially separating noise sensitive signal processing components from a transformer of the voltage converting power supply.

10. The method of providing power to an audio signal processor as in claim 9 further comprising shielding the noise sensitive signal processing components from the transformer.

11. An apparatus for providing power to an audio signal processor, such apparatus comprising:

a voltage converting power supply; and

a receptacle disposed within an enclosure of the audio signal processor, said receptacle being adapted to removably receive the voltage converting power supply.

12. The apparatus for providing power to an audio signal processor as in claim 11 further comprising a receptacle for a plug of an external power source disposed within the housing of the power supply.

13. The apparatus for providing power to an audio signal processor as in claim 11 further comprising a set of external conductors adapted to couple the power supply to the audio signal processor.

14. The apparatus for providing power to an audio signal processor as in claim 13 further comprising an electrical receptacle disposed in the enclosure of the audio signal processor for coupling power from the power supply to the audio signal processor.

15. The apparatus for providing power to an audio signal processor as in claim 13 further comprising a plug disposed on an end of the external conductors for engaging the electrical receptacle in the enclosure of the audio signal processor.

16. The apparatus for providing power to an audio signal processor as in claim 13 wherein the audio signal processor further comprises an audio amplifier.

17. The apparatus for providing power to an audio signal processor as in claim 11 wherein an inner surface of the receptacle and an outer surface of the voltage converting power supply further comprise a complementary set of dimensions.

18. The method of providing power to an audio signal processor as in claim 17 wherein the receptacle and converting power supply further comprise a tapered cross-section.

19. An apparatus for providing power to an audio signal processor, such apparatus comprising:  
a voltage converting power supply; and  
means disposed within an enclosure of the audio signal processor for removably receiving the voltage converting power supply.

20. The apparatus for providing power to an audio signal processor as in claim 19 further comprising means disposed within the housing of the voltage converting power supply for receiving power from an external source.

21. The apparatus for providing power to an audio signal processor as in claim 19 further comprising means coupled to the means for receiving power for coupling the power supply to the external power source.

22. The apparatus for providing power to an audio signal processor as in claim 19 further comprising means disposed in the enclosure of the audio signal processor for coupling power from the power supply to the audio signal processor.